

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of:

Hirotoshi MAEGAWA, et al.

Group Art Unit: 3621

Serial No.:

09/148,832

Examiner: John W. Hayes

Filed:

September 4, 1998

Docket No.: 103203-08003

For:

NETWORK SYSTEM, DATA DISTRIBUTION METHOD, AND RECORDING MEDIUM ON WHICH DISTRIBUTION USE DATA IS

RECORDED AND WHICH CAN BE READ BY COMPUTER

Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

September 17, 2004

APPLICANT'S BRIEF ON APPEAL

Introductory Comments

RECENTED SEP 2 2004 ED By Notice of Appeal, timely filed by hand delivery on March 17, 2004, Applicants appealed the decision of the Examiner stating final rejections of claims 2-52 in the Office Action mailed on December 17, 2003.

This Brief and its Appendix are filed in triplicate with the filing fee (\$165.00). In addition, a Petition for Extension of Time under 37 CFR 1.136(a) accompanied by a credit card payment form to cover the fee payment (\$740.00) for the extension are filed with this Brief. Authorization is granted to charge counsel's Deposit Account No. 01-2300, referencing Attorney Docket No. 103203-08003, for any additional fees necessary for the filing of this Brief.

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(1) Real Party in Interest

The real parties in interest are the Assignees of the subject application, namely, Data Cake Baker Corporation of Tokyo, Japan, and Kazuyoshi Maegawa of Mie, Japan, as is evidenced by an Assignment recorded on June 18, 2003, at Reel 014187 Frame 0960. The subject application is based on two continued prosecution applications, filed on April 29, 2002 and May 1, 2003, respectively.

(2) Related Appeals and Interferences

There are no related appeals or interferences known to Appellants, their undersigned representative or assignee, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The claims on appeal are claims 2-52. The Appendix hereto sets forth all appealed claims.

(4) Status of Amendments

No amendments have been filed after final rejection.

(5) <u>Summary of Invention</u>

The present invention is directed to a network system, a distribution method and a recording medium for distributing various types of information via a network upon demand, providing information concerning the content and carrying out charging by a common method so as to be able to suitably perform electronic commerce via the network. (App. p. 6, 1. 24 – p. 8, 1.

1) Specifically, the network system, the distribution method and the recording medium of the present invention enables the suitable distribution of any content as a transactable product.

The network system comprises one or more data server means and utilization means, and transaction management means comprised on the network system, wherein the data server means transmits to the data utilization means a data package (information package) which includes data relating to a transaction which is composed of content materials and/or references to content materials and the attribute data which define an attribute of the data relating to the transaction. The data server means produces the data package in which the data relating to the transaction and the attribute has a format defining a boundary in accordance with an attribute for the transaction and the scope of data to be used for the transaction, and supplies the produced data package to the utilization means through the network. The data utilization means receives the supplied data package, and utilizes the supplied data package in accordance with the boundary of the received data package. The transaction management means perform processing relating to the transaction on the basis of the boundary of the package every time the data package is received by the data utilization means.

The data distribution method comprises the steps of producing a data package, which includes data relating to a transaction which is composed of content materials and/or references to content materials and the attribute data which define an attribute of said data relating to the transaction, and in which the data relating to the transaction, and the attribute has a format defining a boundary in accordance with an attribute for the transaction and the scope of data to be used for the transaction; supplying the produced data package through the network; receiving the supplied data package; utilizing the supplied data package in accordance with the boundary of the received data package; and processing relating to the transaction on the basis of the boundary of the data package every time the data package is received.

The computer readable recording medium on which a data package is recorded can be read by a computer substantially connected to the network. The data package includes data relating to a transaction and the attribute data which define an attribute of the data relating to the transaction. The data relating to the transaction and the attribute has a format defining a boundary in accordance with an attribute for the transaction and the scope of data to be used for the transaction. The boundary is used for utilizing the data package and processing relating to the transaction of the data package. The data relating to the transaction is composed of content materials and/or references to content materials.

Explanation of the invention is given in the context of an information distribution service to be provided over a network, for example, a movie distribution service providing a movie via a network for a fee. (App. p. 23, 1.6 - 14)

With reference to FIG. 2, the information distribution service comprises a service provider 210, an advertisement provider 240, an advertisement server 250, an information server 220 and an information consumer 260. The service provider 210 provides overall management of the services, including handling of subscriptions and charging of fees. The advertisement provider 240 instructs the advertisement server 250 to distribute advertisement data to the information server 220. The service provider 210 instructs the information server 220 to distribute information to the information consumer 260, including advertisement data. The information consumer 260 receives and utilizes the information received from the information server 220. (App. p. 23, l. 23 – p. 26, l. 8; p. 56, ls. 4 – 23)

The processing systems transmit content to be distributed and control information via an information package having a predetermined information structure. (App. p. 26, ls. 14 – 19)

With reference to FIGS. 25-26, the information server 220 has a package processing unit 231 for

decrypting information packages transmitted from the service provider 210, the advertisement server 250 or the information consumer 260, applying a service control unit 226 to a bulk data receiver unit 230 to retrieve data based on the content of the information package, and successively executing processing according to the content of the information package. (App. p. 57, 1, 1 - p, 59, 1, 8) With reference to FIG. 27, the information consumer 260 has a package processing unit 261 for applying a service control unit 262 to a viewer unit 266 based on the content of an information package transmitted from the service provider 210 or the information server 220, and successively executing processing according to the content of the information package. (App. p. 61, ls. 14 - 23)

In the context of the example of the movie distribution service, there are four basic information packages generated for the main processing of the service. (App. p. 48, ls. 5-8)

When the information consumer 260 requests a service list from the information server 220, the information server 220 generates and transmits a first information package to the information consumer 260. (App. p. 70, l. 19 - 25) The information consumer 260 analyzes the received first information package at the package processing unit 261, which obtains the source of the material content by access on the network according to the content of the multimedia sequence described in that information package. At this time, the information server 220 transmits the desired content to the information consumer 260 upon demand, i.e., the multimedia sequence of the first information package is output to the viewer unit 266 of the information consumer 260. (App. p. 71, ls. 3 - 18) The configuration of the first information package is exemplified in FIGS. 12 - 17. (App. p. 49, ls. 3 - 5)

When the information consumer 260 requests distribution of a selected movie, the information server 220 assembles and transmits a second information package for distributing

the desired movie. The multimedia sequence of the second information package is successively output to the viewer unit 266 of the information consumer 260. (App. p. 71, l. 19 – p. 72, l. 5) The configuration of the second information package is exemplified in FIGS. 19 – 22. (App. p. 53, ls. 7 – 9)

However, in order to obtain the content from the second information package, the information consumer 260 first must be authenticated. Namely, the information consumer 260 transmits a third information package regarding authentication to the information server 220. The package processing unit 231 of the information server 220 carries out the processing for authentication. If authentication is successful, transmission of the movie or other content stream to be charged can be subsequently carried out. (App. p. 72, ls. 5 - 16) The configuration of the third information package is exemplified in FIG. 23. (App. p. 54, ls. 5 - 6)

The service provider 210 sends a fourth information package for billing an advertisement fee to the advertisement server 250 based on a count of advertisements on the information server 220 every preparation period, for example, every month. (App. p. 75, ls. 17-22) The specific configuration of the fourth information package is exemplified in FIG. 24. (App. p. 55, l. 6-7)

(6) Issue

The appeal presents one issue, namely, whether the rejection of claims 2-52 under 35 U.S.C. § 102(e) as being anticipated by the Ginter et al. patent (U.S. Patent No. 5,892,900) is in error.

(7) <u>Grouping of Claims</u>

For purposes of appeal, the claims are grouped as follows: Group I – claims 52 and 2-17; Group II – claims 18-33; and Group III – claims 35-51. The patentability of independent claims

52, 18 and 35 is argued below. Argument is not presented on behalf of the patentability of the dependent claims, which all stand or fall with their respective independent claims.

(8) Argument

There are no rejections or objections under 35 U.S.C. §§ 101 or 112. Independent claims 52, 18 and 35 stand rejected under 35 U.S.C. § 102(e).

A. <u>Discussion of the Applied Prior Art</u>

The Ginter et al. Patent

The Ginter et al. patent appears directed to a virtual distribution environment ("VDE") for secure transaction management and electronic rights protection. (col. 2, ls. 19-24) With reference to FIG. 2, the Ginter et al. patent discloses a "chain of handling and control" model for distributing content. (col. 56, ls. 1-3) Specifically, a VDE content creator 102 creates "content" and may also specify "rules and controls" (control information; methods) for distributing the content, e.g., who has permission to distribute the rights to use content and how many users are allowed to use the content. (col. 56, ls. 6-11) The content creator 102 sends the "rules and controls" associated with the content to a VDE rights distributor 106 ("distributor"). (col. 56, ls. 12-16) The content can be distributed over the same or different path used to send the "rules and controls". (col. 56, ls. 16 - 18) The distributor 106 generates its own "rules and controls" that relate to usage of the content, e.g., what a user can and can't do with the content and how much it costs to use the content. (col. 56, ls. 18-22) These usage-related "rules and controls" must be consistent with the "rules and controls" specified by content creator 102. (col. 56, ls. 22 - 24) The distributor 106 distributes rights to use the content by sending the content's "rules and controls" to a content user 112, who uses the content in accordance with the usage-

related "rules and controls". (col. 56, ls. 25-29) Information relating to content use is reported to a financial clearinghouse 116 who may generate a bill and send it to the content user 112 over a network 118. (col. 56, ls. 30-34)

VDE control information (e.g., methods) that collectively control use of VDE managed properties (database, document, individual commercial product), are either shipped with the content itself (e.g., content container) and/or one or more portions of such control information is shipped to distributors and/or other users in separably deliverable "administrative objects". (col. 43, ls. 21 – 42) With reference to FIG. 5B, information elements (content) are packaged into a "container" 302 ("VDE object 300") so the information cannot be accessed except as provided by its "rules and controls". (col. 59, ls. 8 – 16)

The "rules and controls" may be in the form of a "permissions record (PERC)" 808, "budgets" 308 and "other methods" 1000. The permissions record 808 specifies the rights associated with the VDE object 300, e.g., who can open the container 302, who can use the object's contents, who can distribute the object, and what other control mechanisms must be active. Permissions record 808 may also specify requirements to be applied by the budgets 308 and other methods 1000. Permissions record 808 may also contain security related information such as scrambling and descrambling keys. (col. 59, ls. 42 – 54) Budgets 308, a special type of method 1000, may specify, e.g., limitations on usage of information content 304, how usage will be paid for and how much of the total information content 304 can be used and/or copied, and prevent use of more than the amount specified by a specific budget. (col. 59, ls. 55 – 61) Other methods 1000 define basic operations used by "rules and controls", e.g., how usage is to be metered, if and how content 304 and other information is to be scrambled and descrambled, and other processes associated with handling and controlling information content 304. Other methods

1000 may apply to one or several different information contents 304 and associated containers 302, as well as to all or specific portions of information content 304. (col. 59, 1. 62 – col. 60, 1. 6)

VDE objects 300 may be classified based on whether the protection information is bound together with the protected information. With reference to FIG. 18, a container that is bound by its control(s) to a specific VDE node is called a "stationary object". (col. 136, 1. 60 – col. 137, 1. 3) Stationary object structure 850 is intended to be used only at specific VDE electronic appliance/installations that have received explicit permissions to use one or more portions of the stationary object. Therefore, stationary object structure 850 does not contain a permissions record (PERC) 808; rather, the permissions record is supplied and/or delivered separately (e.g., at a different time, over a different path, and/or by a different party) to the appliance/installation 600. A common PERC 808 may be used with many different stationary objects. (col. 137, ls. 23 -34) With reference to FIG. 19, a container that carries sufficient control and permissions to permit its use, in whole or in part, at any of several sites is called a "traveling object". (col. 136, 1. 60 - col. 137, 1. 3) Traveling object structure 860 may be the same as stationary object structure 850 except that the traveling object structure includes a permissions record (PERC) 808 within private header 804. The inclusion of PERC 808 within traveling object structure 860 permits the traveling object to be used at any VDE electronic appliance/participant 600 (in accordance with the methods 1000 and the contained PERC 808). (col. 137, ls. 57 - 64) Since the content of the traveling object is encrypted, it can be used only under authorized circumstances unless the traveling object private header key used with the object is broken. (col. 139, ls. 30 - 37)

B. The Final Rejection

In the Office Action mailed on December 17, 2003, independent claims 52, 18 and 35 were rejected under 35 U.S.C. § 102(e) as being anticipated by the Ginter et al. patent (U.S. Patent No. 5,892,900).

In the reasoning underlying the final rejections, the Examiner advised as follows:

As per claims 52, 18 and 35, Ginter et al. discloses a network system (Col. 3, lines 20-25) for suitably distributing any content (Col. 8, lines 23-36; Col. 53, lines 55-60) as a transactable product comprising

- one or more data server means, data utilization means, and transaction management means comprised on the network (Figure 2 and 79-84),
- said data server means and utilization means (Figures 1, 1A and 2 and Col. 54, lines 20-35; Col. 55, lines 32-60) transmit and receive through the network a data package (information package) including a data relating to the transaction which is composed of content materials and/or references to content materials and the attribute data which define an attribute of said data relating to the transaction (Col. 10, lines 8-31; Col. 46, lines 5-27 and 47-67; Col. 54, line 64-Col. 55 line 11; Col. 56, lines 6-29; Col. 56 line 65-Col. 57 line 24; Col. 57, line 65-Col. 58 line 12; Col. 137, lines 50-65)
- and in which the data relating to the transaction, and the attribute data has a format defining a boundary in accordance with an attribute for the transaction and the scope of data to be used for the transaction (Col. 10, lines 8-31; Col. 46, lines 5-27 and 47-67; Col. 54, line 64-Col. 55 line 11; Col. 56, lines 6-29; Col. 56 line 65-Col. 57 line 24; Col. 57, line 65-Col. 58 line 12; Col. 137, lines 50-65)
- said data server means supply through the network the data package (Col. 56, lines 6-29; Col. 57 line 65-Col. 58 line 12),
- said data utilization means receive the supplied data package, and substantially acquiring and utilizing said data of said content according to said boundary (Col. 56, lines 25-30; Col. 58, lines 35-50, Col. 60 line 58-Col. 61 line 18; Col. 62, lines 31-50), and
- said transaction management means performs processing relating to the transaction on the basis of said attribute data every time said data package is received by said data server means or said data utilization means (Col. 10, lines 8-31; Col. 46, lines 5-27 and 47-67; Col. 54, lines 33-35; Col. 55, lines 44-48; Col. 58 line 62-Col. 59 line 6).

Furthermore, Ginter discloses that data "containers" contain data relating to both the information content and the "rules and controls" or "permissions" for using the data (Figure 5A and 19; Col. 54 line 64-Col. 55 line 11; Col. 56, lines 20-25; Col. 56 line 65-Col. 57 line 24; Col. 57, lines 65-Col. 58 line 12; Col. 59 line 23-Col. 60 line 6). Ginter further disclose that the "rules and controls" may be distributed with the content or separate from the content, and wherein the "rules and controls" are used to set attributes having a format defining boundaries related to the transaction such as who has permission to distribute the rights to use the content (Col. 56, lines 6-29), how many users are allowed to use the content, what a user can and can't do with the content and how much it costs to use the content (Col. 56, lines 20-25). Ginter further discloses that the "rules and controls" may specify permissions and grant specific individuals or classes of content users access to certain content, what kinds of content usage are permitted and what kinds are not. They may specify how content usage is to be paid for and how much it costs and may require content usage information to be reported back to the distributor and/or content creator (Col. 56 line 65-Coo. 57 line 24) which examiner submits is setting boundaries according to an attribute for the transaction. Furthermore, Ginter discloses that the "rules and controls" may specify other boundaries according to an attribute for the transaction such as which financial clearinghouses may process the payments (Col. 57, lines 15-20). Ginter also discloses a metering process that may be specified in the "rules and controls" and includes information such as the type of usage to charge for, what kind of unit to base charges on, how much to charge per unit and how to pay (Col. 58, lines 50-61). Ginter discloses a budget process that limits the amount of content usage that is permitted which is based upon the number of dollars available in a credit account and the budget process records and reports financial and other transaction information associated with such limits (Col. 58 line 64-Col. 59 line 4). Ginter also discloses the use of traveling objects which include budgets reflecting previously purchased rights or credit for future licensing or purchasing, and budgets that employ (and may debit) available credit stored on and managed by the local VDE node in order to enable object content use (Col. 138, lines 5-19). Ginter discloses that a traveling object may include references to a consumer's VISA, MC, AMEX or other budget that may be used for bill handling and resulting payments (Col. 138, lines 28-55). Ginter also discloses that the information objects may be configured for authenticating, controlling and/or auditing electronic commercial transactions and communications such as inter-bank transactions and electronic purchasing communications (Col. 141, lines 5-25).

C. Argument re: Patentability and Controlling Authority

1. Re Group I Claims

Independent claim 52 recites as follows:

52. A network system for suitably distributing any content as transactable product, comprising:

one or more data server means and utilization means, and transaction management means comprised on the network system, wherein

said data server means transmits to said data utilization means a data package (information package) which includes data relating to a transaction which is composed of content materials and/or references to content materials and the attribute data which define an attribute of said data relating to the transaction;

said data server means produces the data package in which the data relating to the transaction and the attribute has a format defining a boundary in accordance with an attribute for the transaction and the scope of data to be used for the transaction, and supplies the produced data package to said utilization means through the network;

said data utilization means receives the supplied data package, and utilizes the supplied data package in accordance with the boundary of the received data package; and

said transaction management means perform processing relating to the transaction on the basis of the boundary of the package every time the data package is received said data utilization means.

The Examiner has argued that "rules and controls" are used to set attributes having a format defining boundaries related to the transaction, e.g., who has permission to distribute rights to use the content and how many users are allowed to use the content. The Examiner has further argued that the Ginter et al. patent discloses that "rules and controls" may specify permissions and grant specific individuals or classes of content users access to certain content, including the kinds of content usage permitted and payment for such content usage, and has submitted that

"rules and controls" set boundaries according to an attribute for a transaction. However, this argument is in error with respect to the rejection of claim 52.

The Ginter et al. patent fails to suggest or disclose a network system for suitably distributing any content as transactable product, in pertinent part, in which data server means produces a data package in which data relating to the transaction and the attribute has a format defining a boundary in accordance with an attribute for the transaction and the scope of data to be used for the transaction, and supplies the produced data package to utilization means through the network; data utilization means receives the supplied data package, and utilizes the supplied data package in accordance with the boundary of the received data package; and transaction management means perform processing relating to the transaction on the basis of the boundary of the package every time the data package is received by the data utilization means. Rather, the Ginter et al. patent appears to merely disclose VDE objects (e.g., stationary objects and traveling objects) having control information defining access rights of users to the content therein. More specifically, such "rules and controls" for accessing and distributing content is merely set in accordance to the identities of specific individual users or classes of users as designated by VDE content creators or VDE rights distributors so as to authorize access or use through authentication. (col. 57, ls. 18 – 24) Such "rules and controls" are neither equivalent nor analogous to a format defining a boundary in accordance with an attribute for a transaction and the scope of data to be used for the transaction as claimed in the present invention.

In contrast, the present invention discloses, in pertinent part, a data package in which the data relating to the transaction and the attribute has a format defining a boundary in accordance with an attribute for the transaction and the scope of data to be used for the transaction. In other words, the present invention uses the "format" of "the data relating to a transaction and the

attribute" to indicate the boundary. For example, referring to the above context of a movie distribution service, content and control information are distributed via an information package configured using a predetermined information structure or format defining a boundary. In addition, the present invention discloses, in pertinent part, data utilization means receives the supplied data package, and utilizes the supplied data package in accordance with the boundary of the received data package and transaction management means perform processing relating to the transaction on the basis of the boundary of the package every time the data package is received by the data utilization means. For example, referring again to the context of a movie distribution service, the configured information package is processed or converted into a corresponding internal expression to be used by the information consumer for retrieving and displaying the content. The information consumer successively executes processing according to the information package when acquiring and viewing the content. Thus, the present invention facilitates the distribution of information via a network using a common method. Such is neither disclosed nor suggested by the Ginter et al. patent.

Anticipation requires the presence in a single prior art reference of each and every element of the claimed invention, arranged as in the claim. Lindemann Maschinenfabrik GmbH v. American Hoist and Derrick Company, 730 F.2d 1452, 221 U.S.P.Q. (BNA) 481, 485 (Fed. Cir. 1984); Connell v. Sears, Roebuck & Co., 722 F.2d 1542, 220 USPQ (BNA) 193, 198 (Fed. Cir. 1983). Based on the foregoing, the Ginter et al. patent fails to disclose each and every element recited in independent claim 52. It is, therefore, submitted that the invention of claim 52 is not anticipated by the Ginter et al. patent.

2. Re Group II Claims

Independent claim 18 recites as follows:

18. A data distribution method in a network system having a plurality of connected nodes for suitably distributing any content as a transactable product, comprising the steps of:

producing a data package, which includes data relating to a transaction which is composed of content materials and/or references to content materials and the attribute data which define an attribute of said data relating to the transaction;

and in which the data relating to the transaction, and the attribute has a format defining a boundary in accordance with an attribute for the transaction and the scope of data to be used for the transaction

supplying the produced data package through the network;

receiving the supplied data package

utilizing the supplied data package in accordance with the boundary of the received data package; and

processing relating to the transaction on the basis of the boundary of the data package every time the data package is received.

With respect to independent claim 18, the Examiner has put forth the same arguments for claim 52, suggesting that the "rules and controls" of the Ginter et al. patent discloses a format defining a boundary in accordance with an attribute for the transaction. Based on the forgoing, this argument is also in error.

As previously submitted, the Ginter et al. patent does not disclose, in pertinent part, producing a data package in which data relating to the transaction and the attribute has a format defining a boundary in accordance with an attribute for the transaction and the scope of data to be used for the transaction; utilizing the supplied data package in accordance with the boundary

of the received data package; and processing relating to the transaction on the basis of the boundary of the data package every time the data package is received.

Accordingly, the Ginter et al. patent also cannot anticipate independent claim 18 since it fails to disclose producing, utilizing and processing the data package, as claimed. <u>Lindemann</u>

<u>Maschinenfabrik GmbH v. American Hoist and Derrick Company, supra.</u>

3. Re Group III Claims

Independent claim 35 recites as follows:

35. (Previously Presented) A computer readable recording medium on which a data package for distribution of any content as a product for transaction in a network through which a plurality of nodes are connected is recorded and which can be read by a computer substantially connected to the network, wherein

said data package includes data relating to a transaction and the attribute data which define an attribute of said data relating to the transaction;

the data relating to the transaction and the attribute has a format defining a boundary in accordance with an attribute for the transaction and the scope of data to be used for the transaction;

the boundary is used for utilizing the data package and processing relating to the transaction of the data package; and

the data relating to the transaction is composed of content materials and/or references to content materials.

With respect to independent claim 35, the Examiner has put forth the same arguments for claims 52 and 18, namely, suggesting that the "rules and controls" of the Ginter et al. patent discloses a format defining a boundary in accordance with an attribute for the transaction. This argument is also in error.

As previously submitted, the Ginter et al. patent does not disclose, in pertinent part, that data relating to a transaction and the attribute has a format defining a boundary in accordance

with an attribute for the transaction and the scope of data to be used for the transaction and that

the boundary is used for utilizing the data package and processing relating to the transaction of

the data package.

Thus, the Ginter et al. patent also cannot anticipate independent claim 35 since it fails to

disclose the data package and the boundary, as claimed. Lindemann Maschinenfabrik GmbH v.

American Hoist and Derrick Company, supra.

For all of the above noted reasons, it is strongly contended that certain clear differences

exist between the present invention as claimed in claims 2-52 and the prior art relied upon by the

Examiner. It is further contended that these differences are more than sufficient that the present

invention would not have been obvious to a person having ordinary skill in the art at the time the

invention was made.

CONCLUSION

This final rejection being in error, therefore, it is respectfully requested that this honorable

Board of Patent Appeals and Interferences reverse the decision of the Examiner decision with

respect to the final rejections of the argued claims and, on that basis alone, to accordingly find all

claims on appeal patentable.

Dated: September 17, 2004

Respectfully submitted,

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APPENDIX

- 1. (Canceled).
- 2. (Previously Presented) A network system as set forth in claim 52, wherein:

the boundary set for said data package includes a boundary relating to charging for a transaction of said content,

said information of said predetermined attribute included in the data package includes information relating to charging for said content, and

said transaction management means has a charging processing means for carrying out processing based on said information relating to charging every time content delineated by said boundary is newly substantially acquired by said data utilization means.

3. (Original) A network system as set forth in claim 2, wherein:

the boundary set for said data package includes a boundary whereby the content delineated by said boundary is content for which a predetermined property right is set,

said information of said predetermined attribute included in the data package includes information relating to said property right of said content, and

said transaction management means has a property right management means for carrying out processing for updating a property right of content acquired based on said information relating to said property right every time content delineated by said boundary is newly substantially acquired by said data utilization means.

4. (Original) A network system as set forth in claim 3, wherein:

the boundary set for said data package includes a boundary whereby the content delineated by the boundary is content which at least delineated into a range for which substantial acquisition has been authorized by an authorization,

said information of said predetermined attribute included in the data package includes information relating to authorization for substantial acquisition of said content of said data package, and

said transaction management means has a transaction authorization means for carrying out processing for authorization of transactions to control said substantial acquisition of said content based on said information relating to authorization of transactions when said data utilization means attempts to newly substantially acquire content delineated by said boundary.

5. (Original) A network system as set forth in claim 4, wherein:

the boundary set for said data package includes a boundary whereby the content delineated by the boundary is content which at least delineated into a range relating to charging and for which substantial acquisition has been authorized by an authorization,

said information of said predetermined attribute included in the data package includes information relating to charging for said content, and

said transaction authorization means carries outs said processing for authorization of transactions based on said information relating to charging when said data utilization means attempts to newly substantially acquire content delineated by said boundary.

6. (Original) A network system as set forth in claim 5, wherein:

the boundary set for said data package includes a boundary whereby the content

delineated by the boundary is content which is at least delineated into a range owned by a

predetermined owner and for which substantial acquisition has been authorized by an

authorization,

said information of said predetermined attribute included in the data package

includes information relating to ownership of said content, and

said transaction authorization means of said transaction management means

carries out said processing for authorization of transactions based on said information relating to

ownership when said data utilization means attempts to newly substantially acquire content

delineated by said boundary.

7. (Original) A network system as set forth in claim 6, wherein:

the boundary set for said data package includes a boundary whereby the content

delineated by the boundary is content which is at least delineated into a range which has value as

a creative work and for which substantial acquisition has been authorized by an authorization,

said information of said predetermined attribute included in the data package

includes information relating to a copyright of said content, and

said transaction authorization means of said transaction management means

carries out said processing for authorization of transactions based on said information relating to

said copyright when said data utilization means attempts to newly substantially acquire content

delineated by said boundary.

8. (Original) A network system as set forth in claim 7, wherein:

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said information of said predetermined attribute of said data package includes

information designating said transaction authorization means for carrying out processing relating

to authorization of substantial acquisition and

said transaction authorization means is provided on any node on the network and

is driven by being called up by said transaction management means based on said information

designating said transaction authorization means.

9. (Previously Presented) A network system as set forth in claim 8, wherein the

substantial acquisition of said content in said data utilization means includes acquisition of said

data package and use of said content based on information relating to control for utilization of

said content included in said attribute data.

10. (Original) A network system as set forth in claim 9, wherein:

said information relating to control for utilization of said content included in said

data package has information for control of said content from the node in which the content

exists to the node of the data utilization means and

further provision is made of a transmission means for transmitting said content to

said data utilization means through said network based on information for controlling said

transmission when the data utilization means has requested substantial acquisition of said

content.

11. (Original) A network system as set forth in claim 10, wherein:

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said data package has, as its content, time series continuous data existing on any node on said network and has, as information for control for utilization of said content, information for control of transmission of said time series continuous data to said data utilization means,

provision is further made of a transmission management means generated on any node on the network for managing the transmission of said time series continuous data based on said information relating to control for utilization of said content when said data utilization means requests substantial acquisition of said time series continuous data,

a transmission means generated by said transmission management means on the node where said time series continuous data exists for acquiring said time series continuous data and transmitting it in a predetermined transfer format, and

a reception means generated by said transmission management means on the node where said data utilization means exists for receiving data transmitted by said predetermined format and supplying it to said data utilization means, and

a desired location of said time series continuous data is transmitted to said data utilization means and said data utilization means substantially acquires said transmitted time series continuous data through said transmission means and said reception means based on the control of said transmission management means.

12. (Original) A network system as set forth in claim 11, wherein said information relating to control for utilization of said content includes information designating a processing means for utilization of said content and all, some, or one of information on a type of the content,

a property of the content, restrictions on utilization, owner, creator, type of content, and type of

service.

13. (Original) A network system as set forth in claim 12, wherein said data package

further includes information relating to the nature of the content itself.

14. (Original) A network system as set forth in claim 13, wherein any information of said

information of the data package is information referring to information substantially existing in

another data package.

15. (Original) A network system as set forth in claim 14, wherein said data package

substantially has part of information substantially existing in said other data package.

16. (Previously Presented) A network system as set forth in claim 15, wherein further

provision is made of:

a reference request generating means for generating a reference request for

referring to the entity of said data when said data utilization means utilizes information of said

data package referring to another data package and

a management means for managing information on nodes in the vicinity of any

node on the network for any such node and for searching for a destination of reference by

successively propagating said reference request to nodes which may substantially connect with

the node of the designation of reference of said reference request.

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17. (Original) A network system as set forth in claim 16, wherein further provision is

made of a data package disposal means for managing, for said data package, the state by which

information of said data package is referenced from other data packages and managing the

disposal of said data package based on said managed state.

18. (Previously Presented) A data distribution method in a network system having a

plurality of connected nodes for suitably distributing any content as a transactable product,

comprising the steps of:

producing a data package, which includes data relating to a transaction which is

composed of content materials and/or references to content materials and the attribute data which

define an attribute of said data relating to the transaction;

and in which the data relating to the transaction, and the attribute has a format

defining a boundary in accordance with an attribute for the transaction and the scope of data to

be used for the transaction

supplying the produced data package through the network;

receiving the supplied data package

utilizing the supplied data package in accordance with the boundary of the

received data package; and

processing relating to the transaction on the basis of the boundary of the data

package every time the data package is received.

19. (Original) A data distribution method as set forth in claim 18, wherein:

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the boundary set for said data package includes a boundary relating to charging for a transaction of said content,

said information of said predetermined attribute included in the data package includes information relating to charging for said content, and

said predetermined processing relating to a transaction includes charging processing based on said information relating to charging.

20. (Original) A data distribution method as set forth in claim 19, wherein:

the boundary set for said data package includes a boundary whereby the content delineated by said boundary is content for which a predetermined property right is set,

said information of said predetermined attribute included in the data package includes information relating to said property right of said content, and

said predetermined processing relating to a transaction includes processing for updating a property right of content acquired based on said information relating to said property right.

21. (Original) A data distribution method as set forth in claim 20, wherein:

the boundary set for said data package includes a boundary whereby the content delineated by the boundary is content which at least delineated into a range for which substantial acquisition has been authorized by an authorization,

said information of said predetermined attribute included in the data package includes information relating to authorization for substantial acquisition of said content of said data package, and

said predetermined processing relating to a transaction includes processing for authorization of said substantial acquisition of said content based on said information relating to authorization of transactions when said data utilization means attempts to newly substantially acquire content delineated by said boundary.

22. (Original) A data distribution method as set forth in claim 21, wherein:

the boundary set for said data package includes a boundary whereby the content delineated by the boundary is content which at least delineated into a range relating to charging and for which substantial acquisition has been authorized by an authorization,

said information of said predetermined attribute included in the data package includes information relating to charging for said content, and

said processing for authorization of substantial acquisition of said content includes processing carried out based on said information relating to charging.

23. (Original) A data distribution method as set forth in claim 22, wherein:

the boundary set for said data package includes a boundary whereby the content delineated by the boundary is content which is at least delineated into a range owned by a predetermined owner and for which substantial acquisition has been authorized by an authorization,

said information of said predetermined attribute included in the data package includes information relating to ownership of said content, and

said processing for authorization of substantial acquisition of said content includes processing carried out based on said information relating to ownership.

24. (Original) A data distribution method as set forth in claim 23, wherein:

the boundary set for said data package includes a boundary whereby the content delineated by the boundary is content which is at least delineated into a range which has value as a creative work and for which substantial acquisition has been authorized by an authorization,

said information of said predetermined attribute included in the data package includes information relating to a copyright of said content, and

said processing for authorization of substantial acquisition of said content including processing carried out based on said information relating to said copyright.

25. (Original) A data distribution method as set forth in claim 24, wherein:

said information of said predetermined attribute of said data package includes information designating said transaction authorization means for carrying out processing relating to authorization of substantial acquisition and

said processing for authorization of substantial acquisition being carried out by a transaction authorization means provided on any node on the network being selectively called up based on said information designating said transaction authorization means.

26. (Previously Presented) A data distribution method as set forth in claim 25, wherein the substantial acquisition of said content in said data utilization means includes acquisition of said data package and use of said content based on information relating to control for utilization of said content included in said data package.

27. (Original) A data distribution method as set forth in claim 26, wherein:

said information relating to control for utilization of said content included in said data package has information for control of said content from the node in which the content exists to the node of the data utilization means and

said data package is transmitted by transmitting said data package including said content to said data utilization means through said network based on information for controlling said transmission in accordance with a request for substantial acquisition of said content by said data utilization means.

28. (Original) A data distribution method as set forth in claim 27, wherein:

said data package has, as its content, time series continuous data existing on any node on said network and has, as information for control for utilization of said content, information for control of transmission of said time series continuous data to said data utilization means,

a transmission management means for managing the transmission of said time series continuous data based on said information relating to control for utilization of said content is generated on any node on the network when said data utilization means requests substantial acquisition of said time series continuous data,

a transmission means for acquiring said time series continuous data and transmitting it in a predetermined transfer format is generated on the node where said time series continuous data exists, and

a reception means for receiving data transmitted by said predetermined format

and supplying it to said data utilization means is generated on the node where said data

utilization means exists, and

a desired location of said time series continuous data is transmitted to said data

utilization means through said transmission means and said reception means based on the control

of said transmission management means.

29. (Original) A data distribution method as set forth in claim 28, wherein said

information relating to control for utilization of said content includes information designating a

processing means for utilization of said content and all, some, or one of information on a type of

the content, a property of the content, restrictions on utilization, owner, creator, type of content,

and type of service.

30. (Original) A data distribution method as set forth in claim 29, wherein said data

package further includes information relating to the nature of the content itself.

31. (Original) A data distribution method as set forth in claim 30, wherein any

information of said information of the data package is information referring to information

substantially existing in another data package.

32. (Original) A data distribution method as set forth in claim 31, wherein said data

package substantially has part of information substantially existing in said other data package.

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- 33. (Previously Presented) A data distribution method as set forth in claim 32, wherein: said information substantially existing in said other data package generates a reference request by which said data utilization means refers to the entity of said data and a network management means provided for any node of the network for managing information on nodes in the vicinity of any such node successively propagates said reference request to nodes which may substantially connect with the node of the designation of reference of said reference request.
- 34. (Original) A data distribution method as set forth in claim 33, wherein:

 the state by which information of said data package is referenced from other data
 packages is managed for said data package and
 an unnecessary data package is suitably disposed of based on said managed state.
- 35. (Previously Presented) A computer readable recording medium on which a data package for distribution of any content as a product for transaction in a network through which a plurality of nodes are connected is recorded and which can be read by a computer substantially connected to the network, wherein

said data package includes data relating to a transaction and the attribute data which define an attribute of said data relating to the transaction;

the data relating to the transaction and the attribute has a format defining a boundary in accordance with an attribute for the transaction and the scope of data to be used for the transaction;

the boundary is used for utilizing the data package and processing relating to the

transaction of the data package; and

the data relating to the transaction is composed of content materials and/or

references to content materials.

36. (Original) A computer readable recording medium as set forth in claim 35, wherein:

the boundary set for said data package includes a boundary relating to charging

for charging processing carried out each time content delineated by said boundary is

substantially transacted,

said information of said predetermined attribute included in the data package

includes information relating to charging for said content and used for said charging processing.

37. (Original) A computer readable recording medium as set forth in claim 36, wherein:

the boundary set for said data package includes a boundary whereby the content

delineated by said boundary is content for which a predetermined property right is set so as to

perform processing for updating a property right of content acquired based on said information

relating to said property right every time content delineated by said boundary is substantially

transacted and

said information of said predetermined attribute included in the data package

includes information relating to said property right of said content and used for processing for

updating said property right.

38. (Original) A computer readable recording medium as set forth in claim 37, wherein:

the boundary set for said data package includes a boundary whereby the content

delineated by the boundary is content which at least delineated into a range for which substantial

transaction has been authorized by an authorization so as to perform processing for authorization

of said transaction when the content delineated by said boundary is to be substantially transacted

and

said information of said predetermined attribute included in the data package

includes information relating to authorization for substantial transaction of said data package and

is used for the processing for authorization of said transaction.

39. (Original) A computer readable recording medium as set forth in claim 38, wherein:

a boundary relating to charging is set as the boundary set in the data package

giving a content at least delineated into a range for which substantial transaction has been

authorized by an authorization and

information relating to charging for the content is included as the information

relating to authorization of said transaction included in said data package.

40. (Original) A computer readable recording medium as set forth in claim 39, wherein:

a boundary whereby the content delineated by the boundary is content owned by a

predetermined owner is set as the boundary set in the data package giving a content at least

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delineated into a range for which substantial transaction has been authorized by an authorization

and

information relating to the owner of said content is included as the information

relating to authorization of said transaction included in said data package.

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41. (Original) A computer readable recording medium as set forth in claim 40, wherein:

a boundary whereby the content delineated by the boundary is content which has

value as a creative work is set as the boundary set in the data package giving a content at least

delineated into a range for which substantial transaction has been authorized by an authorization

and

information relating to the copyright is included as the information relating to

authorization of said transaction included in said data package.

42. (Original) A computer readable recording medium as set forth in claim 41, wherein:

said information of said predetermined attribute of said data package includes

information designating said transaction authorization means provided on any node on the

network, operating by being called up, and carrying out processing relating to authorization for

substantial transaction.

43. (Original) A computer readable recording medium as set forth in claim 42, wherein

the substantial transaction includes acquisition of said content and acquisition of said content and

use of said content based on information relating to control for utilization of said content.

44. (Original) A computer readable recording medium as set forth in claim 43, wherein

said information relating to control for utilization of said content included in said data package

includes information for control of transmission of said content from the node on which said

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content exists to said data utilization means through said network when the medium is read by a computer connected to the network.

- 45. (Original) A computer readable recording medium as set forth in claim 44, wherein said data package includes time series continuous data as its content and information for control of transmission of said content from the node on which the content exists to said data utilization means through said network when the medium is read by a computer connected to the network.
- 46. (Original) A computer readable recording medium as set forth in claim 45, wherein said information relating to control for utilization of said content includes information designating a processing means for utilization of said content and all, some, or one of information on a type of the content, a property of the content, restrictions on utilization, owner, creator, type of content, and type of service.
- 47. (Original) A computer readable recording medium as set forth in claim 46, wherein said data package further includes information relating to the nature of the content itself.
- 48. (Original) A computer readable recording medium as set forth in claim 47, wherein any information of said information of the data package is information referring to information substantially existing in another data package.

49. (Original) A computer readable recording medium as set forth in claim 48, wherein

said data package substantially has part of information substantially existing in said other data

package.

50. (Original) A computer readable recording medium as set forth in claim 49, wherein

said data package further has a region which is referenced when said data package is to be

disposed of in which the state of information of said data package being referenced by other data

packages is recorded.

51. (Original) A computer readable recording medium as set forth in claim 50, wherein

said region in which the state of being referenced by other data packages is recorded is provided

as a header of said data package.

52. (Previously Presented) A network system for suitably distributing any content as

transactable product, comprising:

one or more data server means and utilization means, and transaction management

means comprised on the network system, wherein

said data server means transmits to said data utilization means a data package

(information package) which includes data relating to a transaction which is composed of content

materials and/or references to content materials and the attribute data which define an attribute of

said data relating to the transaction;

said data server means produces the data package in which the data relating to the

transaction and the attribute has a format defining a boundary in accordance with an attribute for

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utilization means.

the transaction and the scope of data to be used for the transaction, and supplies the produced data package to said utilization means through the network;

said data utilization means receives the supplied data package, and utilizes the supplied data package in accordance with the boundary of the received data package; and said transaction management means perform processing relating to the transaction on the basis of the boundary of the package every time the data package is received said data